

ABSTRACT OF THE DISCLOSURE

The purpose of the present invention is to offer a structure of a CDMA system having a power control method and interference cancellers which can effectively increase the system capacity and is resistant to sudden changes on the communication path, and to achieve a power control method with a fast response capable of preventing unnecessary increases in the transmission power (and multiple access interference) of the uplink by reflecting the values of the post-interference cancellation signal-to-interference power ratio in the generation of power control command information. The invention is directed to a power control method in a communication system for performing communications by code-division multiple access between a mobile station and base station, wherein a multiple access interference signal contained in a reception signal from the mobile station is cancelled, a post-interference cancellation signal-to-interference power ratio of the reception signal currently received is estimated, a power control command is generated by comparing the estimated post-interference cancellation signal-to-interference power ratio and a target value for power control, and transmitting this power control command to the mobile station to control the transmission power of the mobile station.